

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. **(Currently Amended)** A valve body comprising a needle and a cartridge with a recess which takes in the needle and which comprises on one of its ends a seat plate that comprises a needle seat for the needle, wherein the needle further comprises a seat part with a sealing area that rests on the needle seat if it is pushed against the needle seat, wherein the seat part comprises a cavity radially inwards from the sealing area and covering in axial extension the sealing area, wherein the cavity makes the seat part flexible in the sealing area **and enables micrometric deformations of the seat part when engaged in the needle seat,** and wherein the cavity is either empty or filled with a material of a suitable stiffness in order to achieve a desired flexibility of the seat part, **whereby a seal is formed between the seat part and the needle seat when the seat part is engaged in the needle seat.**

2. (Previously Presented) A valve body according to claim 1, wherein the cavity is formed as a blind hole.

3. **(Currently Amended)** A valve body according to claim 1, comprising a filler part that is taken in the cavity, **when the cavity is filled with a material of a suitable stiffness in order to achieve a desired flexibility of the seat part.**

4. (Previously Presented) A valve body according to claim 3, wherein the filler part protrudes into a sack volume formed in the seat plate.

5. (Previously Presented) A valve body according to claim 3, wherein the filler part consists of plastics.

6. (Previously Presented) A valve body according to claim 1, wherein the cavity is formed in an annular shape.

7. (Previously Presented) A valve body according to claim 6, wherein part of the seat part protrudes into a sack volume formed in the seat plate.

8. (Previously Presented) A valve body according to claim 1, wherein the seat part is spherically shaped.

9. (Previously Presented) A valve body according to claim 8, wherein the spherically shaped seat part of the needle is formed by a ball with a hole passing through the ball into which a part of the needle is taken in and which forms together with the needle the cavity.

10. **(Currently Amended)** A fluid injector comprising a housing, an actuator unit and a valve body, wherein the valve body comprising a needle and a cartridge with a recess which takes in the needle and which comprises on one of its ends a seat plate that comprises a needle seat for the needle, wherein the needle further comprises a seat part with a sealing area that rests on the needle seat if it is pushed against the needle seat, wherein the seat part comprises a cavity radially inwards from the sealing area and covering in axial extension the sealing area, wherein the cavity makes the seat part flexible in the sealing area **and enables micrometric deformations of the seat part when engaged in the needle seat**, and wherein the cavity is either empty or filled with a material of a suitable stiffness in order to achieve a desired flexibility of the seat part, **whereby a seal is formed between the seat part and the needle seat when the seat part is engaged in the needle seat**.

11. **(Currently Amended)** A valve body comprising a needle movably arranged within a cartridge with a recess, wherein the cartridge comprises on one of its ends a seat plate that comprises a needle seat, wherein the needle further comprises a tip with a sealing area resting on the needle seat when pushed against the needle seat, wherein the tip comprises

a cavity radially inwards from the sealing area, and wherein the cavity is either empty or filled with a material of a suitable stiffness in order to achieve a desired flexibility of the tip **and to enable micrometric deformations of the seat part when engaged in the needle seat, whereby a seal is formed between the seat part and the needle seat when the seat part is engaged in the needle seat.**

12. (Previously Presented) A valve body according to claim 11, wherein the cavity is formed as a blind hole.

13. (Currently Amended) A valve body according to claim 11, comprising a filler part that is arranged within the cavity, **when the cavity is filled with a material of a suitable stiffness in order to achieve a desired flexibility of the tip and to enable micrometric deformations of the seat part when engaged in the needle seat.**

14. (Previously Presented) A valve body according to claim 13, wherein the filler part protrudes into a sack volume formed in the seat plate.

15. (Previously Presented) A valve body according to claim 13, wherein the filler part consists of plastics.

16. (Previously Presented) A valve body according to claim 11, wherein the cavity has an annular shape.

17. (Previously Presented) A valve body according to claim 16, wherein part of the tip protrudes into a sack volume formed in the seat plate.

18. (Previously Presented) A valve body according to claim 11, wherein the tip is spherically shaped.

19. (Previously Presented) A valve body according to claim 18, wherein the spherically shaped tip of the needle is formed by a ball comprising a hole into which a part of the needle is inserted, wherein the ball together with the needle define the cavity.

20. **(Currently Amended)** A fluid injector comprising a housing, an actuator unit and a valve body, wherein the valve body comprising a needle movably arranged within a cartridge with a recess, wherein the cartridge comprises on one of its ends a seat plate that comprises a needle seat, wherein the needle further comprises a tip with a sealing area resting on the needle seat when pushed against the needle seat, wherein the tip comprises a cavity radially inwards from the sealing area, and wherein the cavity is either empty or filled with a material of a suitable stiffness in order to achieve a desired flexibility of the tip and to enable micrometric deformations of the seat part when engaged in the needle seat, whereby a seal is formed between the seat part and the needle seat when the seat part is engaged in the needle seat.